



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO. .
-----------------	-------------	----------------------	---------------------	--------------------

10/675,370

09/30/2003

Ralph Peter Stodd

7721-C2

5984

7590

09/11/2006

Alan F. Meckstroth
JACOX, MECKSTROTH & JENKINS
Suite 2
2310 Far Hills Building
Dayton, OH 45419-1575

EXAMINER

CASTELLANO, STEPHEN J

ART UNIT

PAPER NUMBER

3727

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/675,370	STODD, RALPH PETER	
	Examiner	Art Unit	
	Stephen J. Castellano	3727	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claims 1-19 have been canceled. Claims 20-31 are pending.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20, 21, 24, 25 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Cospen et al. (Cospen).

Cospen discloses a one-piece sheet metal can shell having in progression from outer edge to center; (1) crown, (2) angular junction, (3) upper chuck wall (UCW), (4) angular break, (5) lower chuck wall (LCW), (6) countersink (CSK), (7) panel wall (PW) and (8) center panel. The first angle is the angle of the UCW between the angular junction and angular break and is A2 in applicant's specification, the second angle is the angle of the LCW between the angular break and the CSK and is A3 in applicant's specification, the third angle is the angle of the inner wall of the crown extending upwardly of the angular junction and is A4 in applicant's specification, and the fourth angle is the angle of the PW between the CSK and the center panel. Cospen discloses the angular relationships of first angle greater than second angle, third angle less than first angle, and fourth angle greater than first angle as stated in claim 20.

Re claims 21 and 31, the width of the CSK is less than the width of the PW.

Re claim 25, the radius of curvature of the PW is greater than the width of the CSK.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 3727

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cospen.

Cospen discloses an inner radius of curvature of the CSK equal to $\frac{1}{2}$ the width of the CSK. Cospen fails to disclose the inner radius of curvature of the CSK being less than $\frac{1}{2}$ the width of the CSK. Official notice is taken that CSK with two inner radii, one smaller and one larger are well known in the metal can art. It would have been obvious to modify the CSK to have a smaller radius and a larger radius to provide the benefit of bending strength and reinforcement strength properties afforded such two radii CSK construction. Therefore, the smaller radius would be less than $\frac{1}{2}$ the width of the CSK.

Claims 23 and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cospen in view of Brifcani.

Cospen discloses the invention except for the width of the UCW greater than the width of the CSK. Cospen discloses a width of CSK (W_{CSK}) equal to about $2 \times r$, where the radius is .65mm; $W_{CSK} = 1.3$ mm. The chuck wall is steep configuration having an angle generally perpendicular to the center panel. Brifcani teaches a can end with a similar configuration having a chuck wall and a CSK, the chuck wall has a shallower profile with angle C being between 20 to 60 degrees with respect to the center axis, also the radial dimensions of the chuck wall of :

$$\frac{1}{2} d_3 - \frac{1}{2} d_2 - r_1 = W_{CW} = 3.685 \text{ mm (using dimensions from table in col. 3).}$$

The radial dimension of an upper chuck wall W_{UCW} of Brifcani would be approximately $\frac{1}{2} W_{CW}$, therefore,

$$W_{UCW} = 1.8425 \text{ mm.}$$

Art Unit: 3727

It would have been obvious to modify the UCW of Cospen to be shallower by increasing the width of the UCW to 1.8425 mm and increasing the angle with the vertical axis to between 20 to 60 degrees to provide a more efficient use of material as this would decrease the amount of material necessary for the can end of the same thickness. This change in dimensions would also move the CSK inwardly towards the center axis which better protects the center area of the can end. With this change in dimension the $W_{UCW} = 1.8425 \text{ mm}$ and $W_{UCW} > W_{CSK}$.

Applicant's arguments with respect to claims 20-31 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Castellano whose telephone number is 571-272-4535. The examiner can normally be reached on increased flexibility plan (IFP).

Art Unit: 3727

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Stephen J. Castellano
Primary Examiner
Art Unit 3727
